AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1-4. (cancelled)

5. (previously presented) A composite material comprising:

a matrix phase; and

a coupled fiber reinforcement structure formed of at least one high aspect ratio fiber wherein said coupled fiber reinforcement structure has an aspect ratio of less than ten,

wherein said coupled fiber reinforcement structure comprises a first and second pair of parallel fibers, said first and second pair being coupled orthogonal to each other.

6. (previously presented) The composite material of Claim 5 wherein said fibers are selected from the group consisting essentially of carbon fiber, glass fiber, and kevlar.

7. (previously presented) The composite material of Claim 5 wherein said matrix is a thermosettable polymer.

8. (previously presented) The composite material of Claim 7 wherein the matrix material is a selected from the group of epoxy resin, polyester resins, vinyl-ester resins, and phenolic resins.

9. (previously presented) The composite material of Claim 7 wherein the matrix material is a selected from the group of polyimides, bismaleimides, and polybenzimidazoles.

10. (previously presented) The composite material of Claim 5 wherein said matrix is a thermformable polymer.

11. (previously presented) The composite material of Claim 10 wherein the matrix material is a selected from the group of polycarbonates, polysulphones, polyether-ether-ketone and polyamides.

12. (previously presented) The composite material of Claim 5 wherein said coupled fiber reinforcement structure has an aspect ratio of less than five.

13. (previously presented) The composite material of Claim 5 wherein said coupled fiber reinforcement structure has an aspect ratio of about one.

14-15. (cancelled)

16. (previously presented) A coupled fiber reinforcement structure comprising:

a pair of fibers adjoined by a joint, said joint maintaining the coupled fiber reinforcement structure during a molding process; wherein said coupled fiber reinforcement structure has an aspect ratio of less than ten and comprises a first and second pair of parallel fibers, said first and second pair being coupled orthogonal to each other.

17. (previously presented) The coupled fiber reinforcement structure of Claim 16 wherein said fibers are selected from the group consisting essentially of carbon fiber, glass fiber, and kevlar.

18. (cancelled)

19. (previously presented) The composite material of Claim 5, wherein the high aspect ratio fiber has a length in the range of 0.2 to 0.8 millimeters.

20. (previously presented) The composite material of claim 19, wherein the high aspect ratio fiber has a diameter in the range of five to twenty micrometers.

21. (new) A method of forming a composite material comprising the steps of:

forming a coupled fiber reinforcement structure formed of a pair of fibers adjoined by a joint, at least one of the fibers being a high aspect ratio fiber and wherein the coupled fiber reinforcement structure has an aspect ratio of less than ten, said joint maintaining the coupled fiber reinforcement structure during a molding process; and

combining the coupled fiber reinforcement structure with a matrix phase.